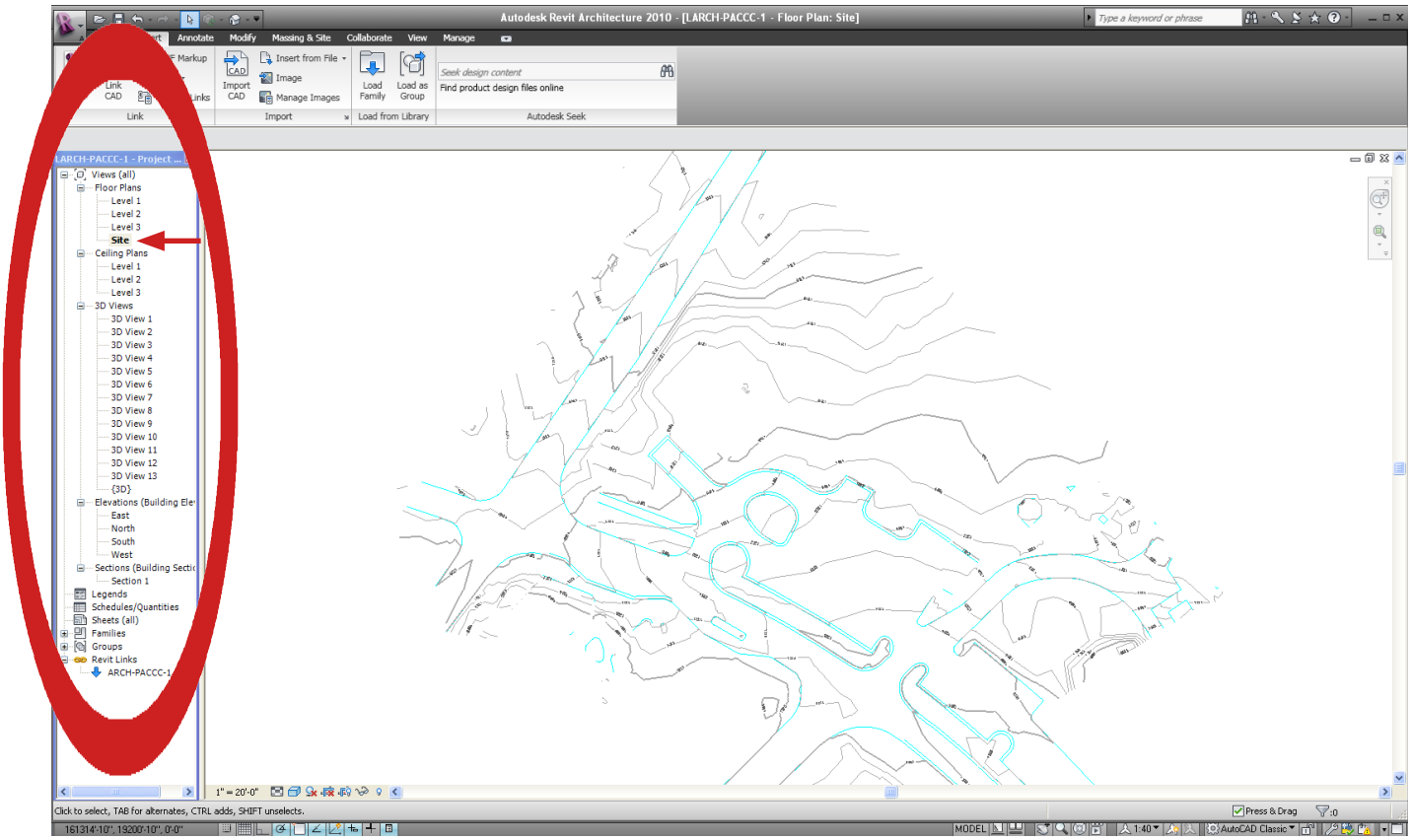
Creating Topography in REVIT from an AutoCAD file.

ABSTRACT: Map a ground plane in 2-dimensions in AutoCAD and import file directly into REVIT then transition 2-dimensional ground plane into 3-dimensional topography. Explanation also applies to editing existing topography.

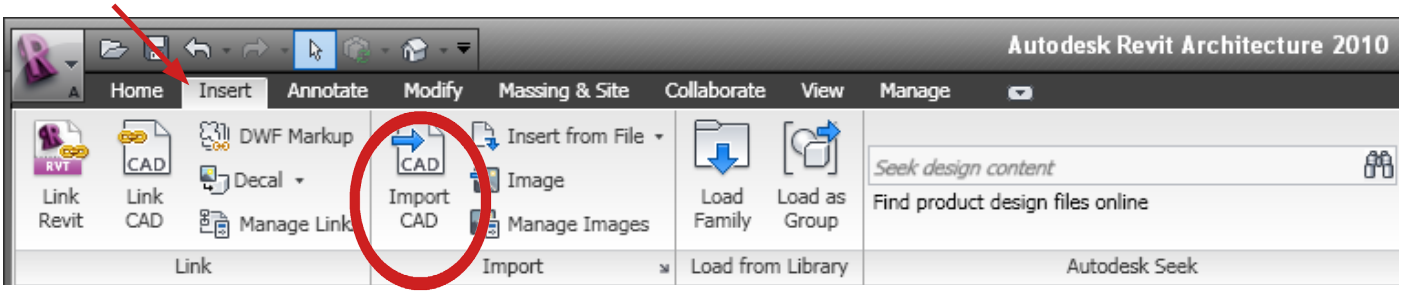
1. Open the CAD file that you hope to import in REVIT. Be certain that the layers you want to see are turned on. If they are off they will not be visible when the file is linked. Save file.

2. Switch to REVIT. In the "Project Browser" menu select the site view under the floor plan option. We work be working in this view for the remainder of the process.



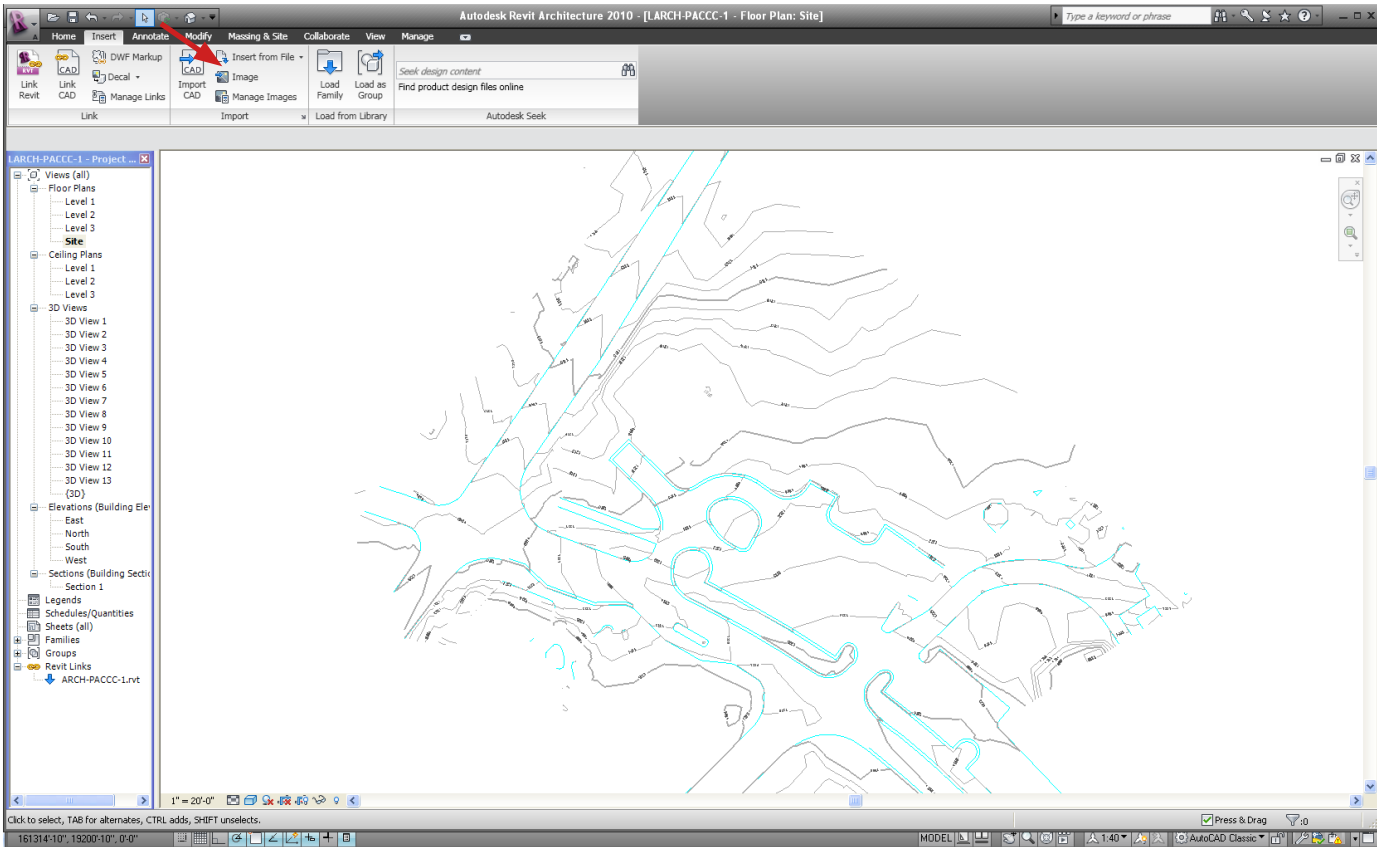
3. Left click on the "Insert" tab in the Menu.

4. The "Insert" menu will have options to "link CAD" and "Import CAD." While either will bring the CAD file into REVIT "Import CAD" is the option we will chose. Left click on "Import CAD."



5. The CAD file should load and be visible on screen.

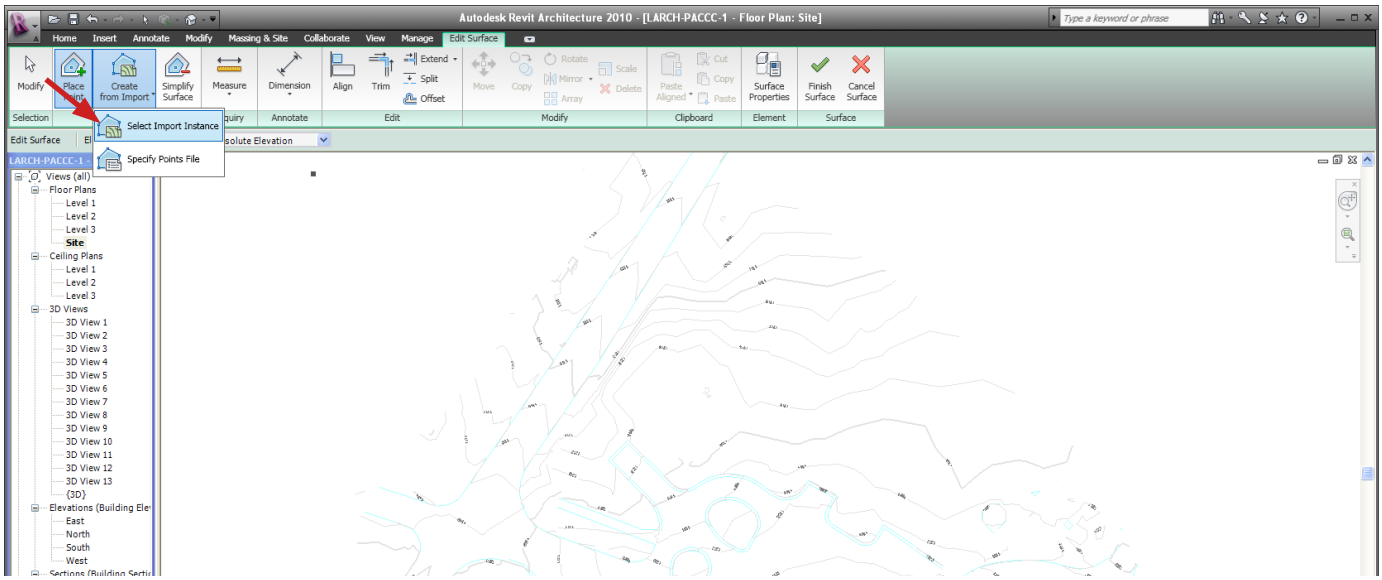
6. Select the “Massing and Site” tab in the Menu. All work with topo will be done in this tab.



7. Left click “Toposurface” icon in Menu. This will show a new tool set for manipulating topography.

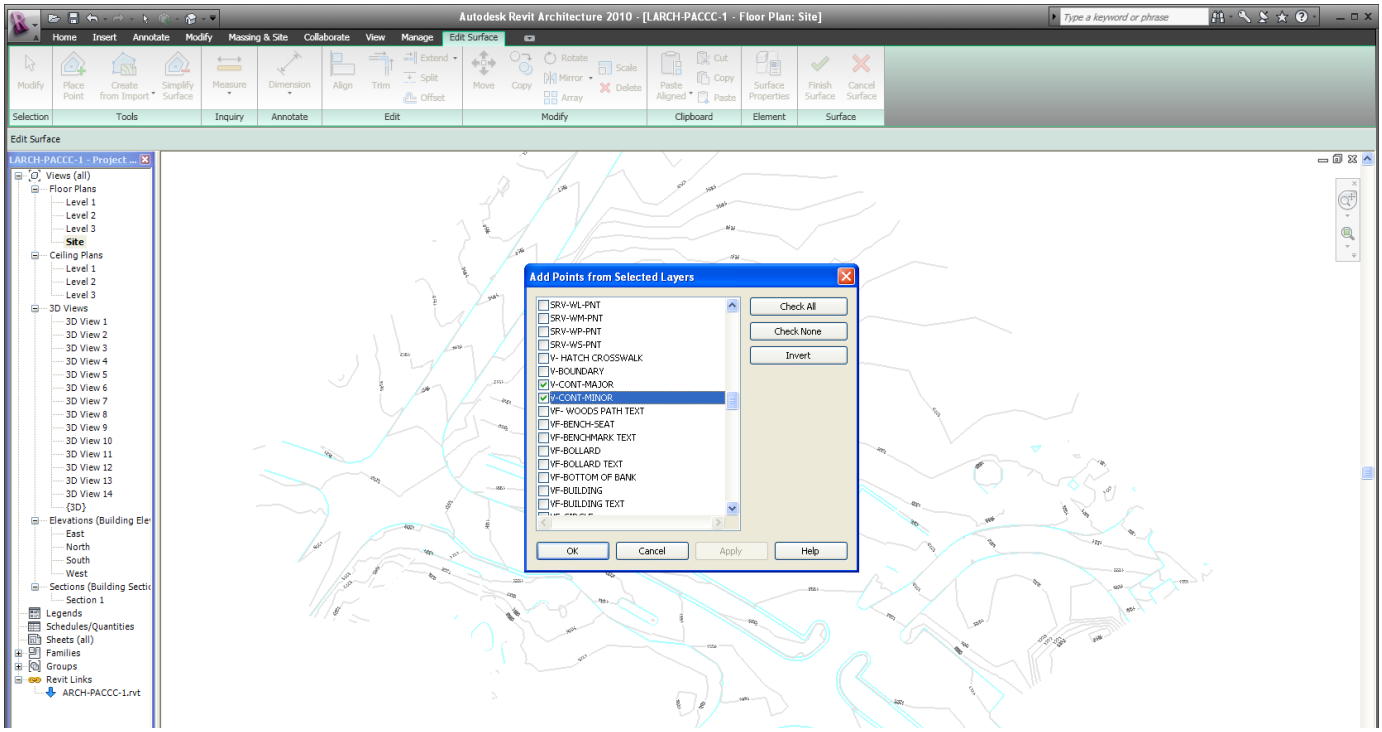
8. Left click “Create from Import” Icon. This will drop down a Menu with two options.

9. Left click “Select Import Instance,” the first choice.



10. Left click the imported CAD file which contains the topography. This is extremely important. Nothing will change on screen until the import is chosen.

11. When the import is chosen a menu will appear onscreen displaying all of the layers contained in the AutoCAD file. Select only the layers that relate to the topography, specifically the contours.

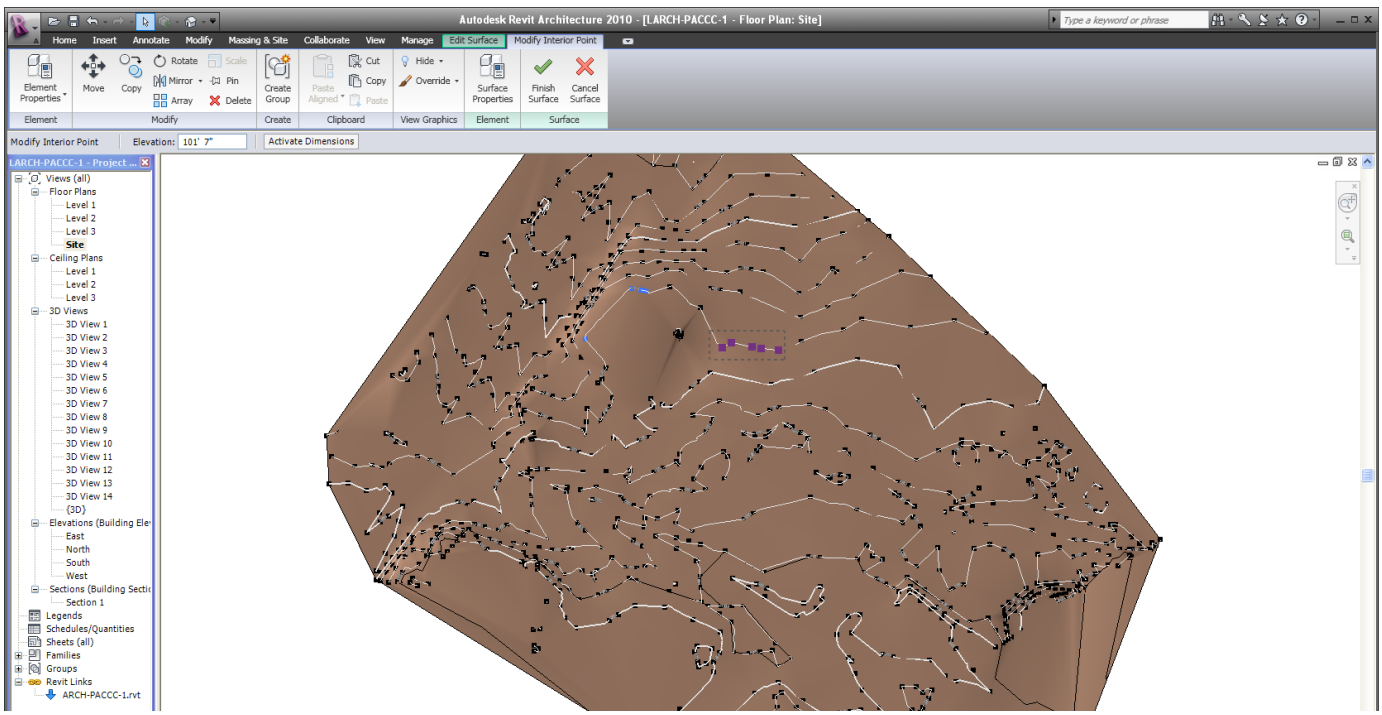


12. Left click “okay.”

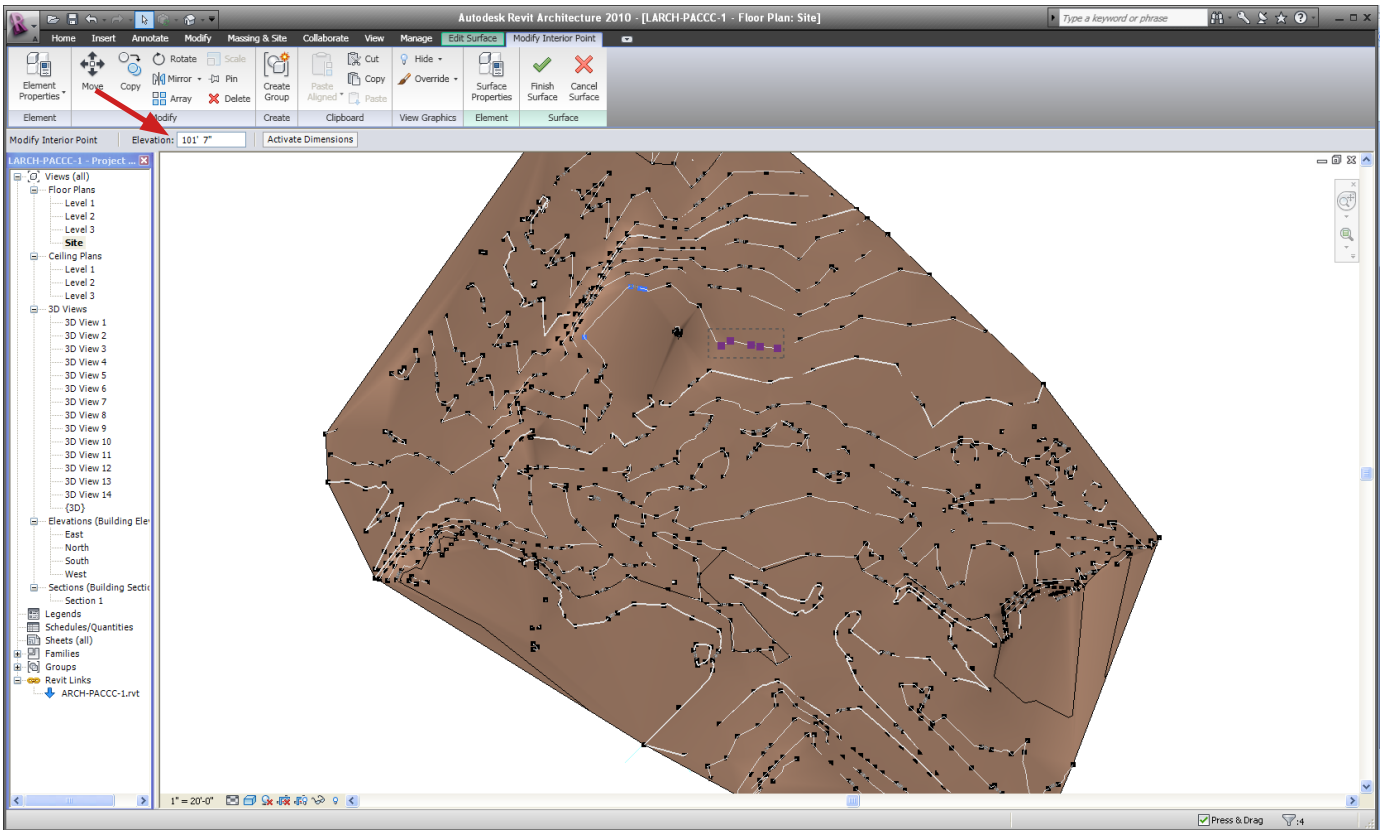
(NOTE: if elevations are assigned to each contour the following steps are not necessary)

13. The image will change displaying every point of the contours. Currently all contours are set to one elevation. The next steps will be assigning them their proper elevations.

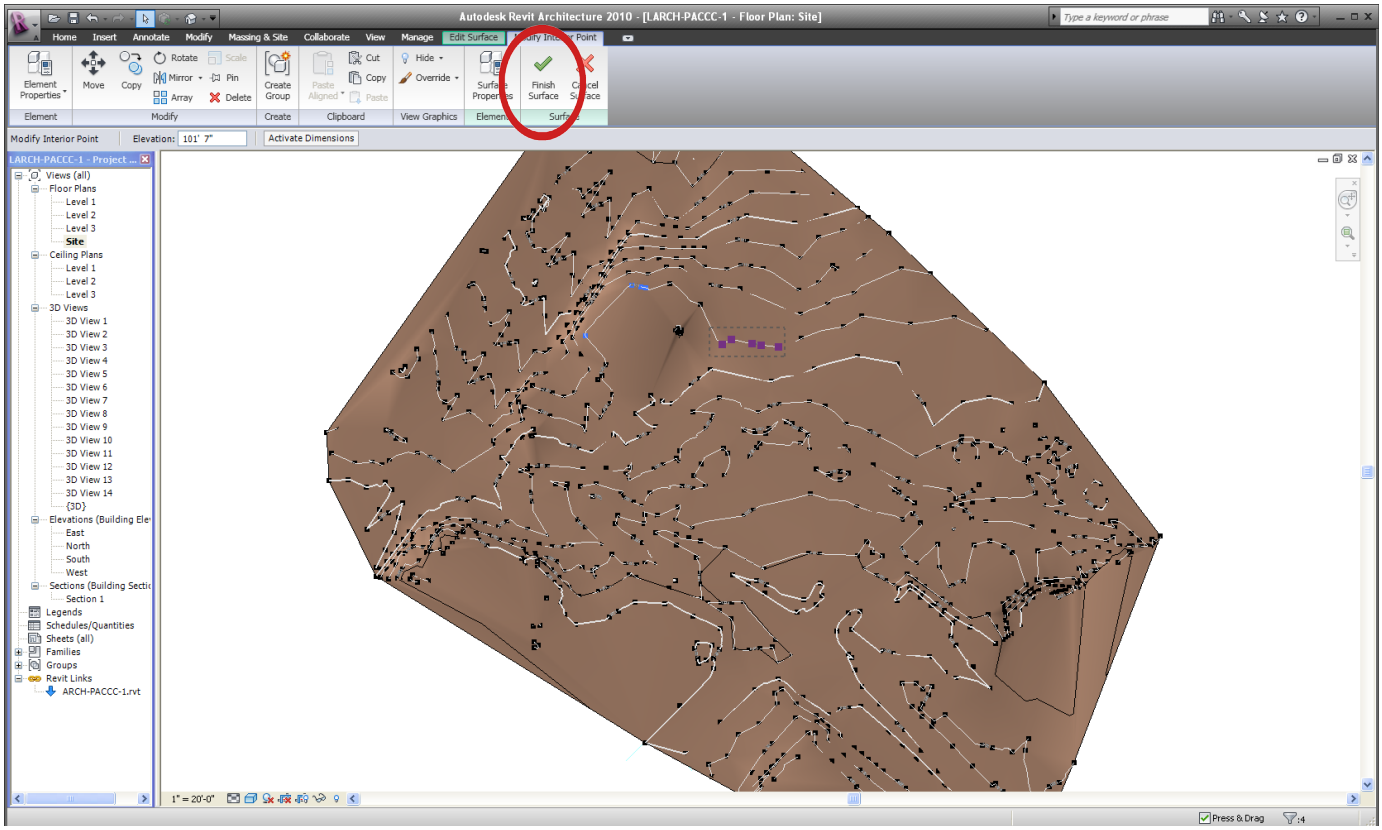
14. Select all the points of a contour line. By holding control you are able to add points to the selected group.



15. When the points are selected change the elevation in the box in the top left to desired elevation.



16. When the contours are properly set left click the “Finish Surface” icon in the menu bar.



16. That should complete your topography surface. At any point it can be edited by left clicking “Toposurface” and using the modify arrow